

ABSTRACT

The present invention provides a clock extraction apparatus and method for an optical signal. The clock extraction apparatus includes optical branching means, optical
5 filtering means, and clock extraction means. The optical branching means branches an optical signal, which has been transmitted from a transmitting end to a receiving end, into a plurality of optical signals to be transmitted to a plurality of paths. The optical filtering means simultaneously reflects
10 the center wavelength and a specific side peak wavelength of the optical signal, which has been transmitted to a first path of the plurality of paths, to the optical branching means, the specific side peak wavelength being spaced apart from the center wavelength by a clock frequency. The clock extraction
15 means extracts a clock by detecting and bandpass filtering the beating signal from the center wavelength and the specific side peak wavelength reflected to the optical branching means.